

19. Explain the concept of Bioremediation and its applications.
20. Describe the importance of microorganisms in the production of SCP (Single Cell Protein).

APRIL/MAY 2025

FABC42/CABC42 — MICROBIOLOGY II
(Allied)

Time : Three hours

Maximum : 75 marks



SECTION A — (10 × 2 = 20 marks)

Answer ALL questions.

1. What is the role of microorganisms in soil formation?
2. Name two types of Plant Growth Promoting Bacteria.
3. What is the purpose of Biofertilizers?
4. Define Phosphate solubilization.
5. What is the difference between Biopesticides and Pesticides?
6. Name two types of microorganisms found in air.
7. Define Sewage Treatment.
8. What is the purpose of Pasteurization?

9. Name two types of microorganisms that cause food spoilage.
10. What is the role of *Mycobacterium tuberculosis* in human disease?

SECTION B — (5 × 5 = 25 marks)

Answer ALL questions.

11. (a) Explain the importance of Nitrogen-fixing bacteria in soil.

Or

- (b) Describe the different types of microorganisms found in water.

12. (a) Explain the process of Sewage Treatment.

Or

- (b) Describe the different types of food preservation techniques.

13. (a) Explain the concept of Microbial Spoilage of food.

Or

- (b) Describe the role of microorganisms in Milk fermentation.

14. (a) Explain the process of Pasteurization.

Or

- (b) Describe the different types of microorganisms that cause waterborne diseases.

15. (a) Explain the concept of Microbial Fermentations.

Or

- (b) Describe the importance of microorganisms in bioremediation.

SECTION C — (3 × 10 = 30 marks)

Answer any THREE questions.

16. Describe the morphology and cultural characteristics of *Vibrio cholerae*.

17. Explain the transmission and control of *Salmonella* infections.

18. Describe the role of dermatophytes in human disease.

